

# PHENIX WEEKLY PLANNING



5/10/2012  
Don Lynch

TECHNICAL  
SUPPORT  
2012

## This Week

- U-U run continues
- Short maintenance access yesterday
- Next scheduled maintenance access: 5/23/12?
- sPHENIX design and analysis continues, EMCal vendor meeting this afternoon
- MPC-EX review dress rehearsal meeting this afternoon; External Review Friday
- 2012 Shutdown prep continues
- Other Business

## Next Week

- U-U run continues
- Next scheduled maintenance access day Wednesday 5/23
- sPHENIX design and analysis continues
- 2012 Shutdown prep continues
- Other Business

# Looking Ahead to the 2012 Shutdown

(Continued)

2/1-6/25/2011

## Prep for shutdown

- Define tasks and goals
- Analysis and design of fixtures, tools and procedures
- Fabricate/procure tools and fixtures
- Tests, mockups, prototypes
- Receive, fabricate, modify, finish installables
- Review and approval of parts, tools, fixtures and proceures
- Assembly and QA tests
- AH Crane Upgrade (variable speed & wireless remote)

## End of Run Party

6/22/2012

## Run 12 Ends

6/25/2012

## Shutdown Standard Tasks

6/25-7/20/2012

- Open wall, disassemble wall, Remove MuID Collars,
- Move EC to AH, etc.

## Disassemble VTX/FVTX services

7/2-7/27/2012

## Remove VTX/FVTX and transport to Chemistry Lab

7/30/2012

## Remove MMS & MMN vertical East lampshades

7/23-7/27/2012

## Summer Sunday (8/5) Prep and teardown

8/1-8/7/2012

## Summer Sunday (RHIC)

8/5/12

## MuTr South Station 1 work

- Install access (Sta. 1work platforms)
- Disconnect Cables, hoses etc, ID/label all
- Remove FEE plates and chambers
- Station 2 Terminators and manifold upgrade through access opened by station 1 removal

7/30-8/3/2012

8/6-8/10/2012

8/13-8/17/2012

8/20/-8/31/2012

# Looking Ahead to the 2012 Shutdown (Continued)

TECHNICAL SUPPORT ZONE

MuTr South Station 1 work (Cont'd)

Clean/install new MuTr Sta. 1 chamber parts and upgrades  
(concurrent At RPC Factory)

Re-install chambers and FEE plates

Re-cable, re-hose and test

Repair upgrade, test, reinstall VTX/FVTX

Station 3 North and South (upper half)

re-capacitance and air manifold upgrades

Substation breaker upgrade/test (CAD)

AH utility power distribution upgrade

DC West maintenance (replace window)

RPC stations 1 and 3, north and south maintenance

Other detector maintenance as required

Infrastructure maintenance as required

TBD prototype tasks

pre-run commissioning and prep for run 13

Prep for EC roll in

Roll in EC

Prep IR for run

Pink/Blue/White sheets

Start run 13

8/20/-9/7/2012

9/10-9/14/2012

9/10-9/28/2012

7/23-10/26/2012

7/23-9/30/2012

8/20-9/30

8/20-9/30

9/15-10/15

As required

As required

As required

As required

11/1-12/31/2012

11/12-11/16/2012

11/19-11/23/2012

11/26-12/3/2010

12/3-12/21/201

1/1/2013



## New Electrical Work for 2012 Shutdown, not yet scheduled

1. Support CAD replacement of Assembly Hall 480V Fused Switch Panels #8H-1, 8H-2, and 8 EMH1. Coordinate temporary power patch while work is being performed and minimize impact on shutdown work.
2. Add the Assembly Hall Crane lockout/contactors/ indicator light key switch circuit - similar to IR Crane.
3. Add Transient Surge Suppressor to 3 phase power panel on the Central Magnet Bridge.
4. The Gas Mixing House Breaker Panel for the Gas Mixing side is almost out of spare breaker slots and needs to be reviewed for increased capacity panel to replace it.
5. New computer rack replacements/additions for upcoming Run 13 & Rack Room computer infrastructure changes involving power distribution circuit (UPS and normal AC power) re-work.

### Additional Work for 2012, not yet scheduled

1. Replaced aging magnet hoses (CM only)
2. identify obsolete services passing through sill and remove them.
3. Revisit cover for services coming from IR through sill.
4. Plan for stripping out TEC electronics and services to free up TEC racks.
5. Add limit switch and improved spooling control for window washer cable.

# FVTX Preparing for Shutdown Activities

TECHNICAL SUPPORT 2012

- **Pre-Shutdown:**
- Debug missing wedge problems and determine if work needed to make more stable
- Debug START problem with some ROCs and determine if work needed to make more stable
- Survey readout of entire system again and record all possible wedge/ROC/FEM repairs that might be needed
- If any remaining issues with wedge readout, START delivery at end of Run, **determine if we want to keep FVTX in the IR for some number of days to continue the debug work in the IR environment.**
- Investigate any wedges with high bias current draw, wedges with "abnormal noise"
- **Determine if we want to make any changes to the cooling system. Make proposal to PHENIX, order additional parts if need...**
- **Perform simulations of neutron shielding to see if it makes sense to propose modification of nosecone.**
- Get 2 ROCs ready for replacement of SW5, SE5 that were damaged during commissioning
  - Q/A again spare 4 ROCs and if necessary repair them before shutdown.
  - Make arrangements to get 2 ROCs that will be pulled out of big wheel repaired.
- Order additional FEMs. **(BNL)**
- Get Physics Lab set back up for operating the FVTX detector.



# FVTX Shutdown Activities

TECHNICAL  
SUPPORT  
2012

## During Shutdown:

- Replace SE5, SW5 ROCs.
- Repair any FEMs that need repair work (missing latches, bad LED boards...).
- Determine if we can improve wedge LV cable connections to the ROC: make pigtails? determine how a cable can be "locked" to the ROC.
- Determine if we want to re-lay out clock distribution board (START issues). Line up designer to do work/
- Make plan for fixing or replacing the damaged data fibers (part of trunk fibers). Better plan for having spares available in the IR.
- **Modify support structure member in the area where it interferes with plugging in two data fibers.**
- **Possible modifications to cooling system.**
- Irradiate wedge(s) in controlled environment (up to expected 10-year dose) and track performance. (LANL beam line available in August)

**Red indicates activities that could impact others**

# VTX Shutdown Activities

## Issues in West VTX-Stripixel

- Barrel #2:
  - Ladders:
    - B2L02: we think it has problem with its LDTB board
  - RCCs: required removing ladders to fix these RCCS
    - B2L04: RCC1 (hybrid #4 couldn't be configured)
    - B2L06: RCC4 (all hybrids couldn't be configured)
    - B2L06: RCC1 (data integrity Problem)
- Barrel #3:
  - Ladders:
    - B3L10: bias voltage problem. Well known problem in Run-11 and we postponed its repair to summer 2012
  - RCCs: required removing ladders to fix these RCCs
    - B3L06: RCC1 (all hybrids couldn't be configured)
    - B3L09: RCC5 (all hybrids couldn't be configured)
    - B3L09 : RCC4 (data integrity Problem)

## VTX Shutdown Activities, Cont'd

Issues in **EAST** VTX-Stripixel

- **Barrel #2:**
  - **Ladders:**
    - None
  - **RCCs:** required removing ladder to fix these RCCs:
    - B2L11: RCC2 and RCC4 (all hybrids couldn't be configured)
    - B2L08: RCC1 (data integrity problem)
    - B2L12: RCC1 (data integrity problem)
    - B2L13: RCC2 (data integrity Problem)
- **Barrel #3:**
  - **Ladders:**
    - B3L16: we think it has problem with its LDTB board
  - **RCCs:** required removing ladders to fix RCCs
    - B3L13 RCC1 (hybrid #3 couldn't be configured)
    - B3L13 RCC5 (all hybrids couldn't be configured)
    - B3L23 RCC4 (hybrid #3 couldn't be configured)

## VTX Shutdown Activities, Cont'd

TECHNICAL SUPPORT 2012

## Summary: Repairs Plan for Summer-2012

- **Priority # 1: 4.9%** (LDTBs repairs)
  - B2L02 (west side)
  - B3L16 (east side)
- **Priority # 2: 2.7%** remove ladder, problem existed since Run-11
  - B3L10 : bias voltage problem ( barrel 4: west side)
- **Priority # 3: 5.2% = 3 % + 2.2%** required remove ladders
  - West:
    - B2L06- RCC4, B3L06-RCC1, B3L09-RCC5 (all hybrids couldn't configure)
    - B2L04-RCC1-H4 (one hybrid couldn't configure)
    - B2L06-RCC1 (data integrity Problem)
    - B3L09-RCC4 (data integrity Problem)
  - East:
    - B2L11-RCC2 and -RCC4, B3L13-RCC5 (all hybrids couldn't configure)
    - B3L13-RCC1-H3, B3L23-RCC4-H3 (one hybrid couldn't configure)
    - B2L08: RCC1 (data integrity problem)
    - B2L12: RCC1 (data integrity problem)
    - B2L13: RCC2 (data integrity Problem)

# VTX Shutdown Activities, Cont'd

## Ladder Repair Status

- Totally, 5 ladders were taken out for repair in last summer.
- Two ladders were newly installed in Run-12.
  - We have not seen any additional massive broken wire for all ladders in Run-12.
- One ladder (ladder s/n 37) out of removed 5 ladders were used for the encapsulation test since this ladder had large delamination area of bump bonding.
- We are now proceeding to repair for 5 ladders (removed 4 ladders + 1 spare ladders).

Ladder S/N	Wire Bond	Q/A	Encapsulation	Q/A
5	ongoing	-	-	-
32	done	O	done	O
34	done	O	ongoing	-
35	done	O	ongoing	-
37	For half ladder	O	For half ladder	O
38	done	O	ongoing	-

Slides by Maki Kurosawa

# VTX Shutdown Activities, Cont'd

## Ladder Repair Status

- Totally, 5 ladders were taken out for repair in last summer.
- Two ladders were newly installed in Run-12.
  - We have not seen any additional massive broken wire for all ladders in Run-12.
- One ladder (ladder s/n 37) out of removed 5 ladders were used for the encapsulation test since this ladder had large delamination area of bump bonding.
- We are now proceeding to repair for 5 ladders (removed 4 ladders + 1 spare ladders).

Ladder S/N	Wire Bond	Q/A	Encapsulation	Q/A
5	ongoing	-	-	-
32	done	O	done	O
34	done	O	ongoing	-
35	done	O	ongoing	-
37	For half ladder	O	For half ladder	O
38	done	O	ongoing	-

Slides by Maki Kurosawa

# Muon Tracker Work for Shutdown 2012

## DC mtg, May 9, 2012 - Mike Leitch

TECHNICAL SUPPORT-2012

- Station-1 South re-capacitation and termination
- Station-2 South (upstream) termination
- Station-2 North Oct-2 HV repairs
- Station-3 termination clamps
- muTrig FEE repairs



vacuum lifting fixture



view when sta-1 removed (south)





## MuTr Work in the RPC Factory Area

TECHNICAL SUPPORT 2012

Soldering on new capacitors to station-1 chambers, adding plug-on terminators, & testing at HV

- Cleaning of pads with scraping tools and occasionally with soldering iron and solder wick (most are pretty clean already) - no solvents needed
- Use soldering irons and small amounts of solder to put capacitors onto existing pads
  - use "smoke eater" aspiration unit while soldering
- Add plug-on terminators at existing connectors on chamber edges
- Flow Ar/CO<sub>2</sub>/CF<sub>4</sub> gas (non-flammable) for HV testing at full (< 2000V) voltage
- Once HV is verified ok; paint on conformal coating with brush over capacitors and pads (Print Kote, toluene based) - existing small bottles should be more than enough for this job
- No readout tests are needed until chambers/FEE are reinstalled at 1008
- Workers to read RPC Factory Work Plan and sign before starting work

before



after



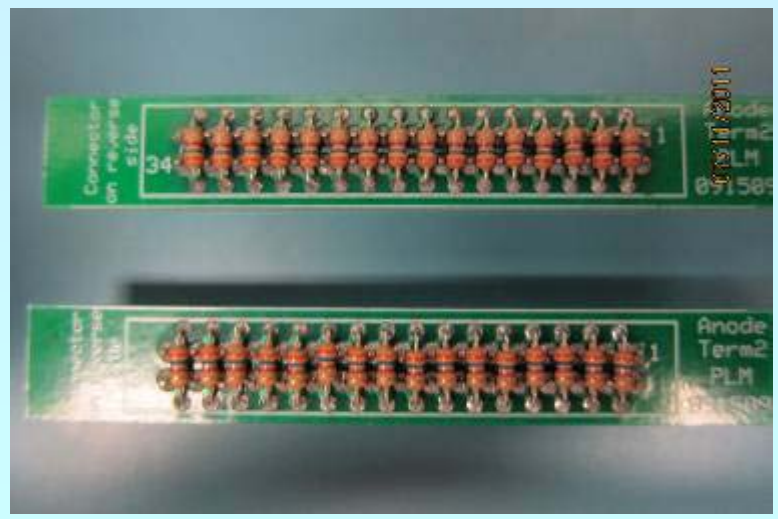


Terminators ready - thanks to Steve Boose  
(should have enough of these; need to double check)

Station-1



Station-2



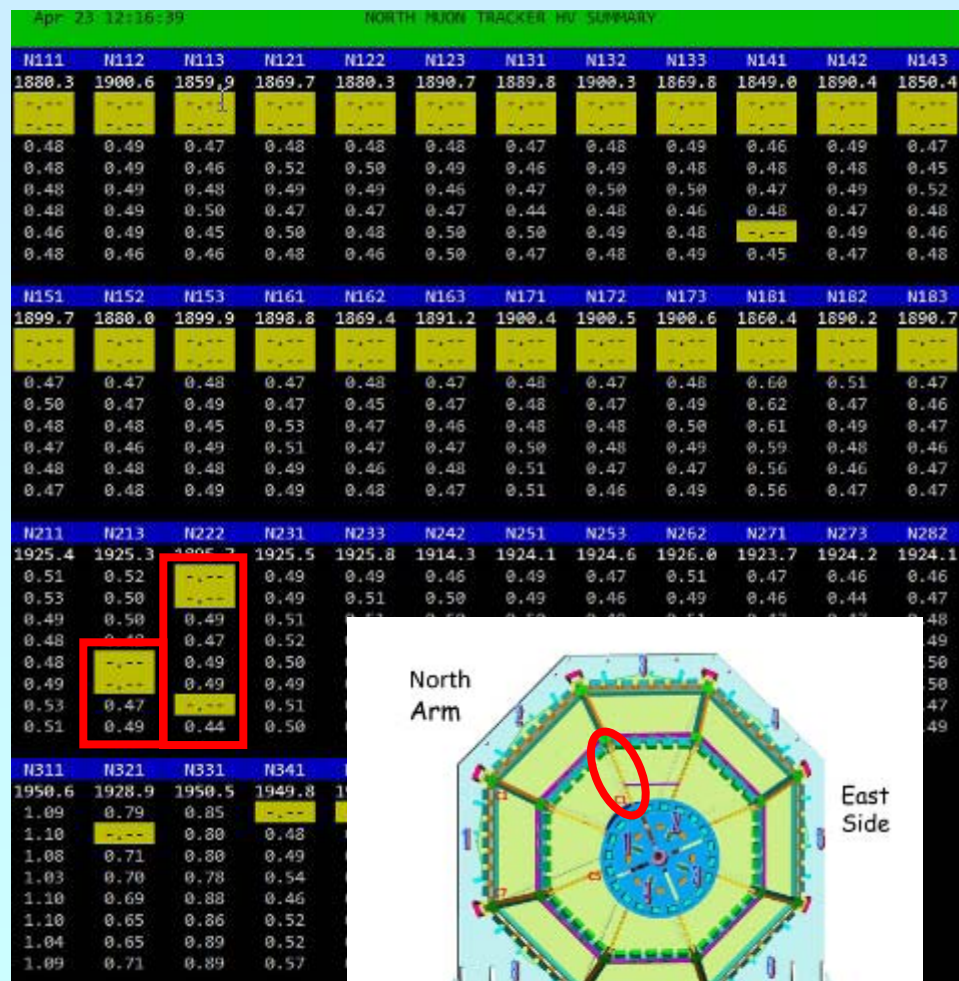
# North Sta-2 Oct-2 HV Repairs

TECHNICAL SUPPORT 2012

5/12 HV channels in North Sta-2 Oct-2 bad

- located on interior of magnet at top
- pull dry air minifold
- investigate why these channels bad
- potentially remove and replace capacitors
- or isolate broken wires and disconnect from HV to recover other wires in same HV channel
- replace dry air manifold

Also check HV clamp-terminators in North Sta-3 (3 HV channels are disabled); and in South

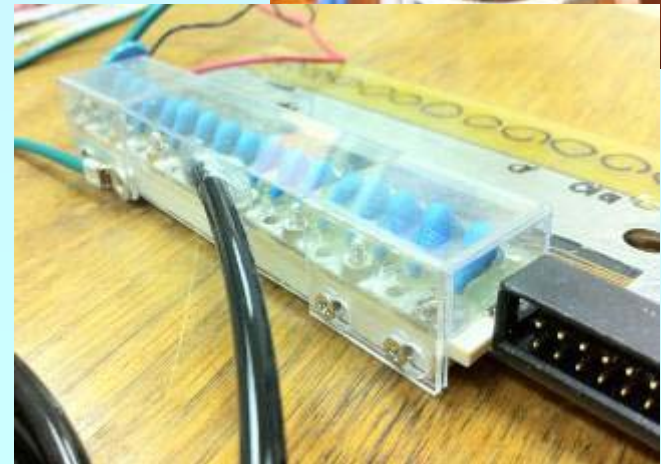
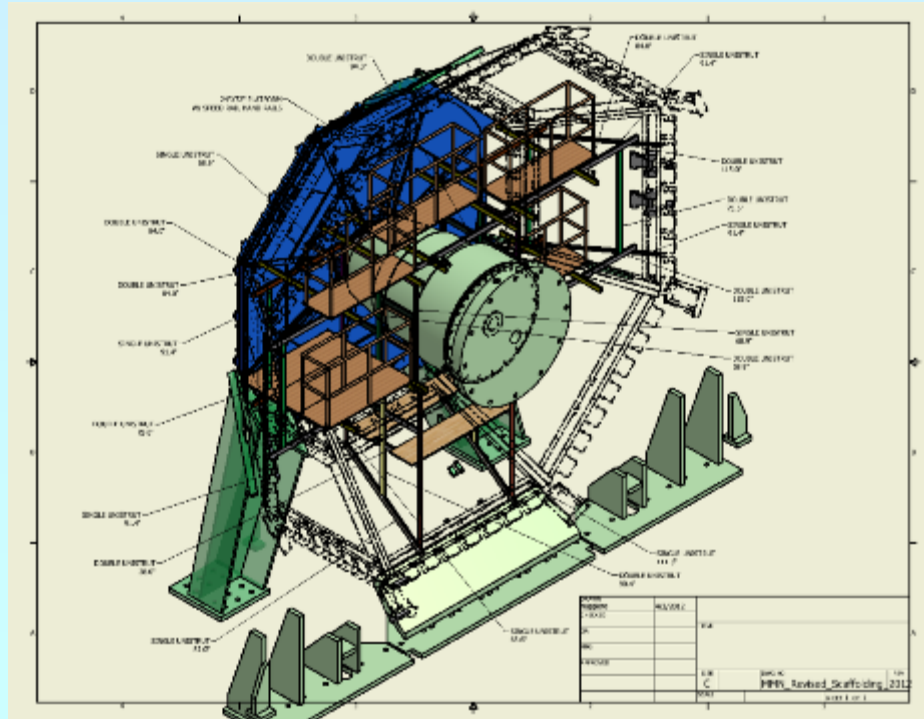


View from IR

# Clamp-on Terminator Installation on North & South Station-3

TECHNICAL SUPPORT

- Lower clamp-on terminators already installed for both north and south sta-3 (bottom 4 octants)
- with new scaffolding that reaches all of sta-3; install remaining (upper) clamp-on terminators (300?)





# List of ADTX boards to be serviced

https://www.phenix.bnl.gov/WWW/offline/wikioffline/index.php/Bad\_Channel\_History

Run PHENIX goo 辞書 Yahoo! JAPAN ニュース (5928) 理研電話帳 アップル (1) tmp Google マップ CNI 関数電卓

134.160.38.17 talk for this ip

article discussion edit history

## Bad Channel History

(All notations are 1 origin this page)

### Bad ADTX Board History

Date	Run	Elog Entry	Arm	St	Oct	Chs	Brd	Symptom	Solution (Date)
2012 April 14	Run12 pp 510	1012, 5392 (Run12)	South	2	2	3	2	link error, adtx fifo empty & full error	-
2012 April 4	Run12 pp 510	1008	North	1	2	1	1	Data is corrupted	-
2012	Run12 pp 200	1013	South	2	4	4	1	Frequent BCLK counter error in ADTX	-
2011 May 21	Run 11 AuAu	878	South	2	3	4	1	Got hot in Run11 AuAu	enabled in Run12 and OK
2011 May 18	Run11 AuAu	877	North	3	6	2	2	Frequent error, masked	enabled in Run12 and OK
2011 May 18	Run11 AuAu	877	South	2	1	4	1	Frequent error, masked	enabled in Run12 and OK
Before Run11	-	-	North	3	4	7	2	Masked	-
Before Run11	-	-	North	3	4	1	1	Masked	-

navigation

- Main Page
- Community portal
- Current events
- Recent changes
- Random page
- Help
- Donations

top 10 contributors

- Chiu (456)
- Jkoster4 (453)
- 192.168.1.165 (381)
- 192.168.1.165 (340)

# Rough Schedule; Manpower to be Determined

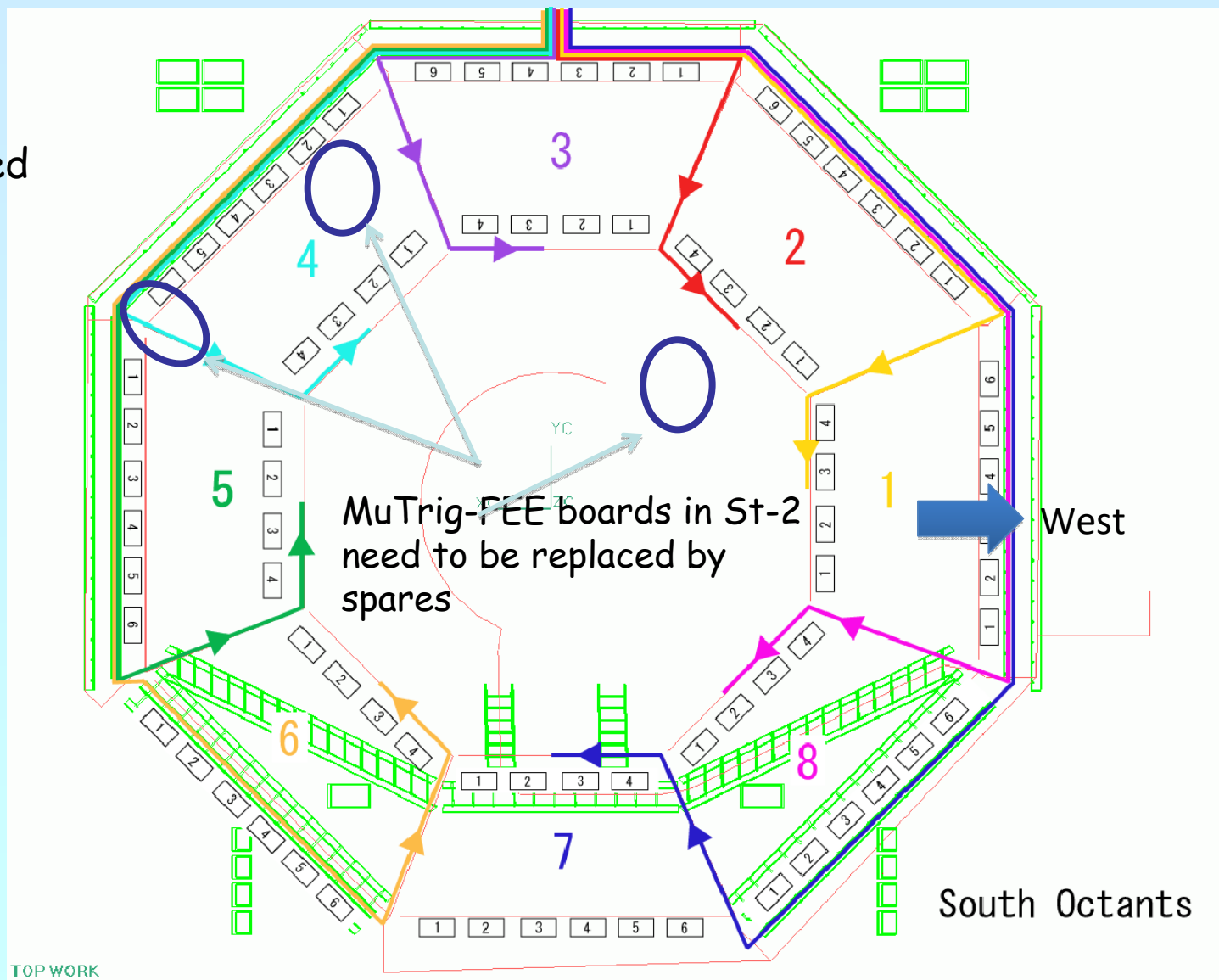
TECHNICAL SUPPORT 2012

<u>Week</u>	<u>south sta-1</u>	<u>who</u>	<u>south sta-2</u>	<u>who</u>	<u>north sta-2 HV</u>	<u>who</u>	<u>sta-3 clamp term.</u>	<u>who</u>
Jul 23-29							inner scaffolding?	techs
Jul 30 - Aug 5	install access	*					clamp install.	d,e
Aug 6-12	label & disconnect	a,b,c,d,e			fix oct-2 HV	b,c	" "	
Aug 13-19	remove chambers	*			" "		" "	
Aug 20-26	terminate in lab	a,b,c,d,e	terminate	*	" "		" "	
Aug 27- Sep 2	" "	" "			" "		" "	
Sep 3-9	" "	" "			" "		" "	
Sep 10-16	reinstall chambers	*			" "		" "	
Sep 17-23	recable & test	a,b,c,d,e			" "		" "	
Sep 24-30	" "	" "			" "		" "	

\* techs  
a Joe  
b Mike  
c Kwangbok  
d Itaru  
e 3 students  
others?

# South Station-2

Location of electronics to be serviced



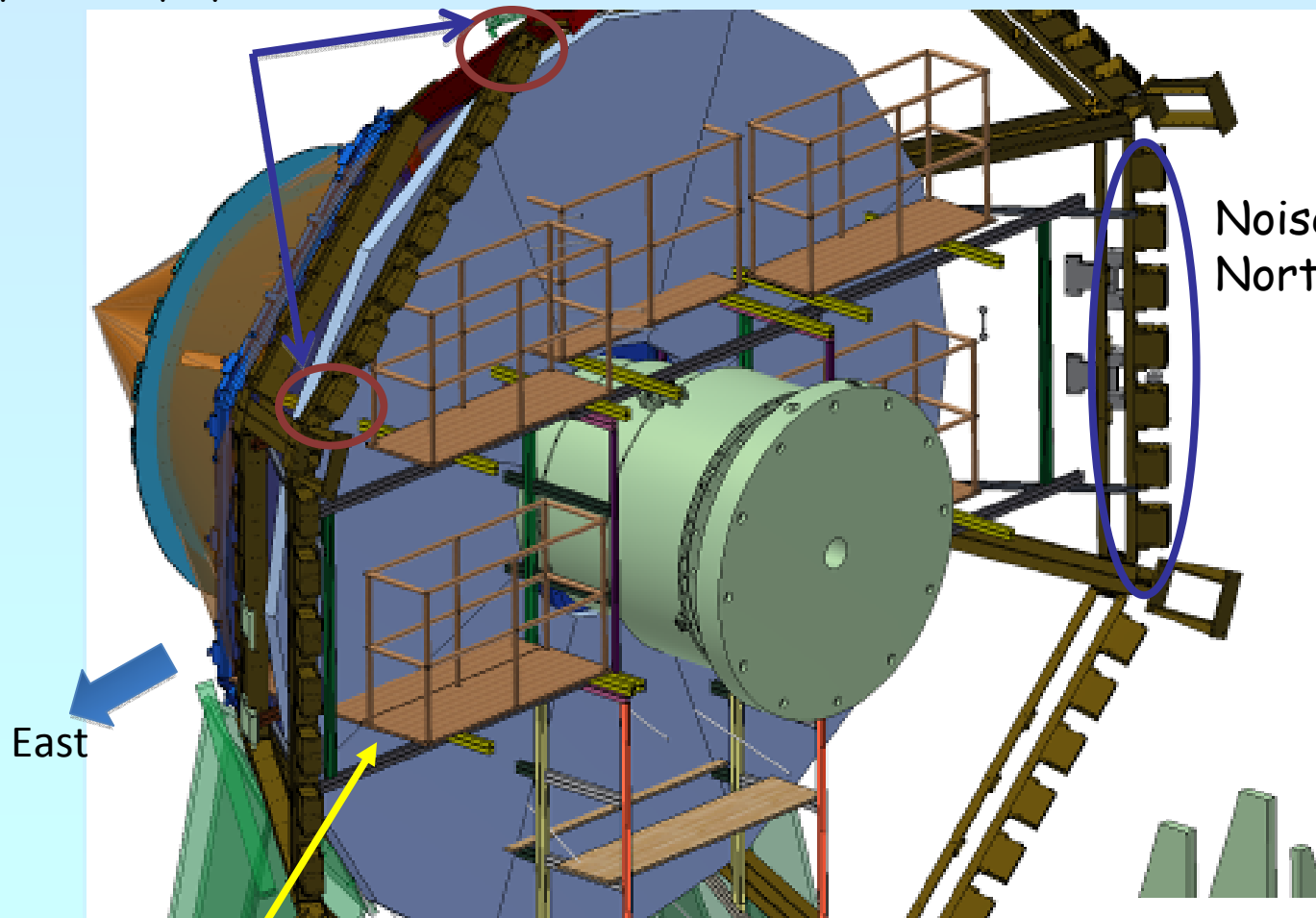
5/10/2012

22

No boards in station-3 need to be served as of today.

# North Station-3

Octant-4  
MuTrig Electronics  
boards need to be  
replaced by spare



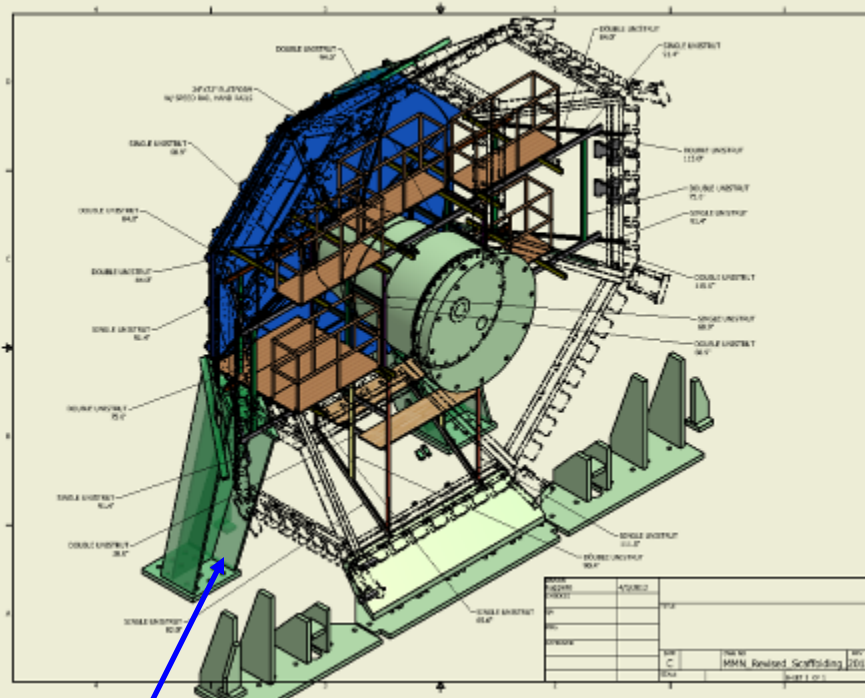
Noise inspection  
North St-3 Oct-3



AH Crane variable speed drive  
and wireless remote upgrade ??

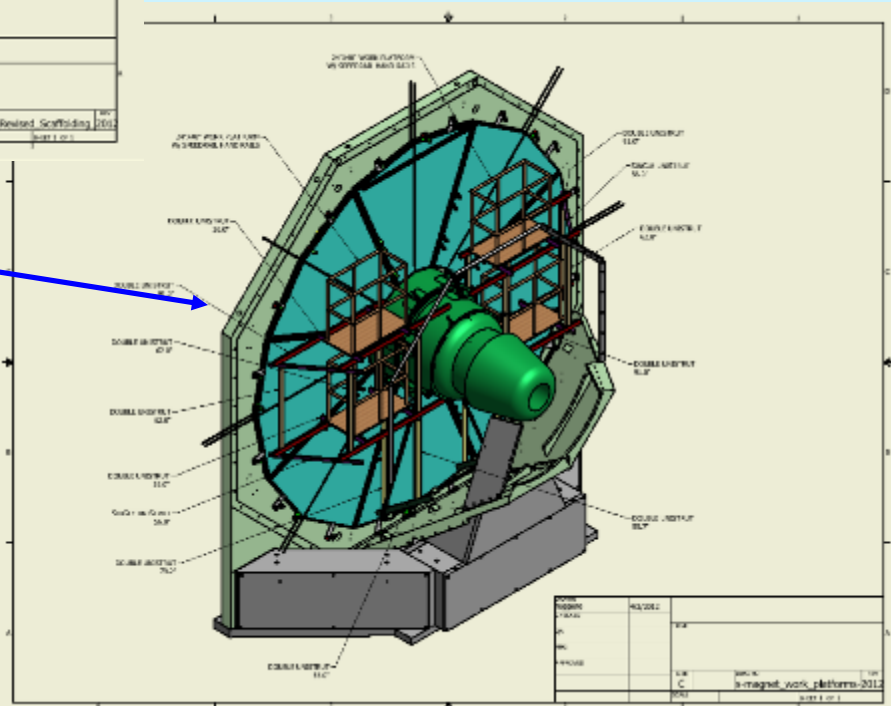


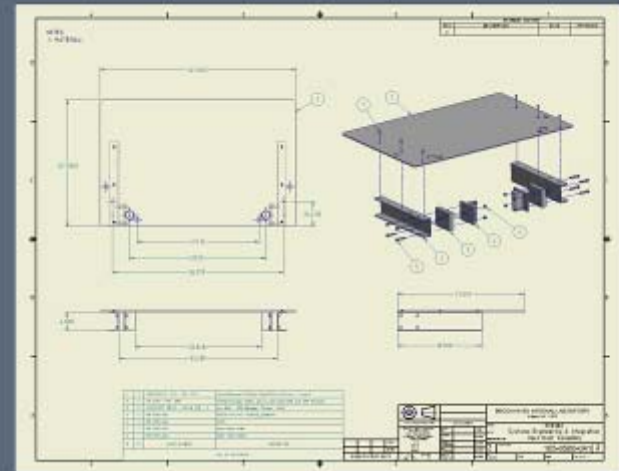




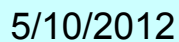
North & South internal work platforms for next summer's shutdown

Sent analyses to C-A ESRC for review last week

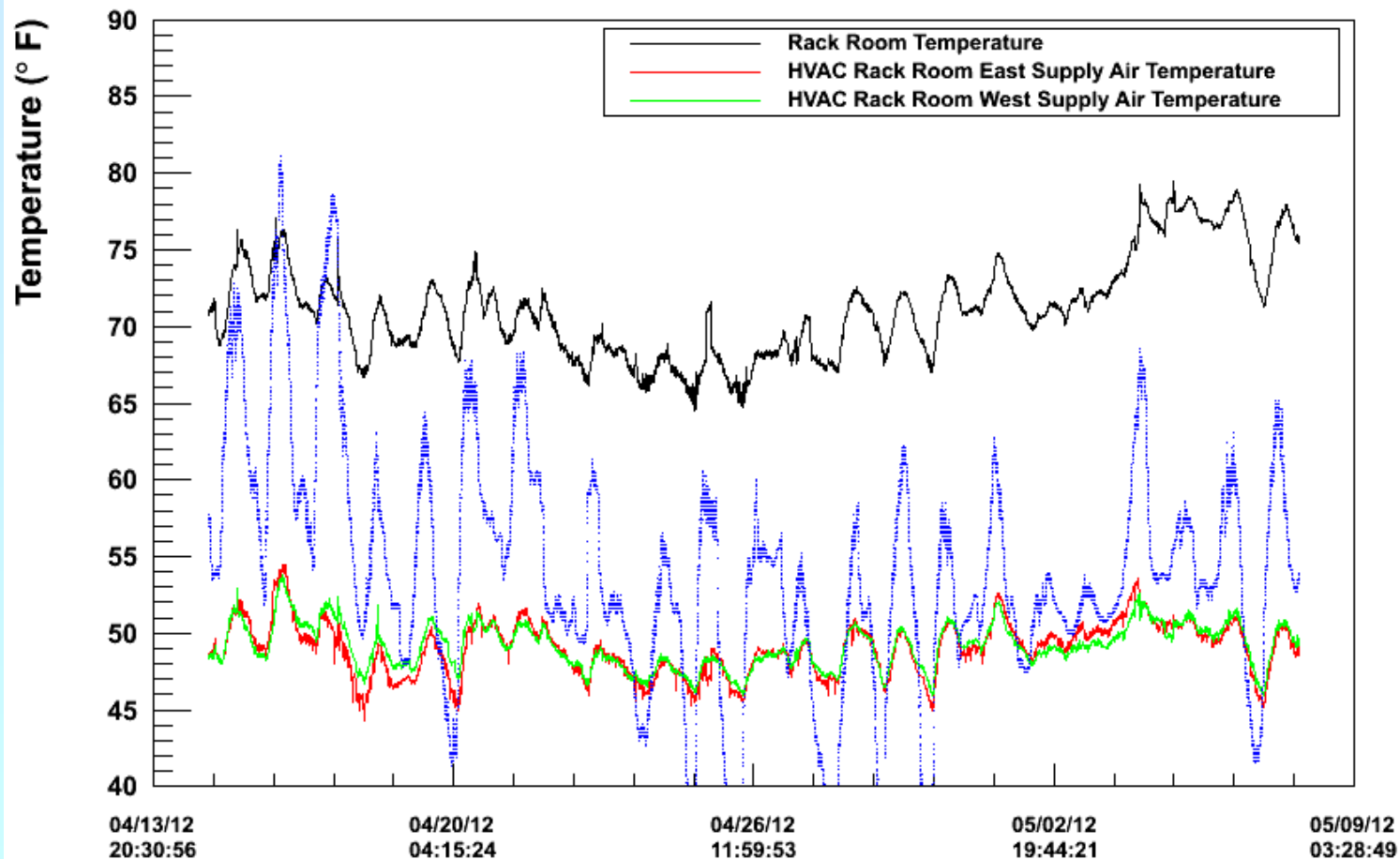


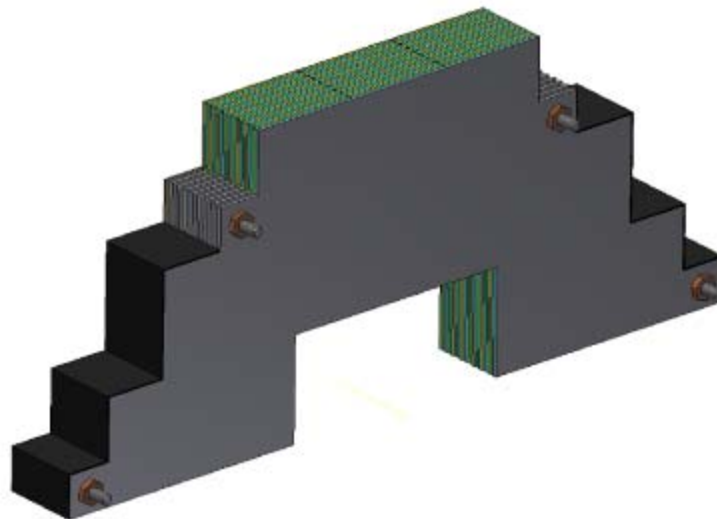
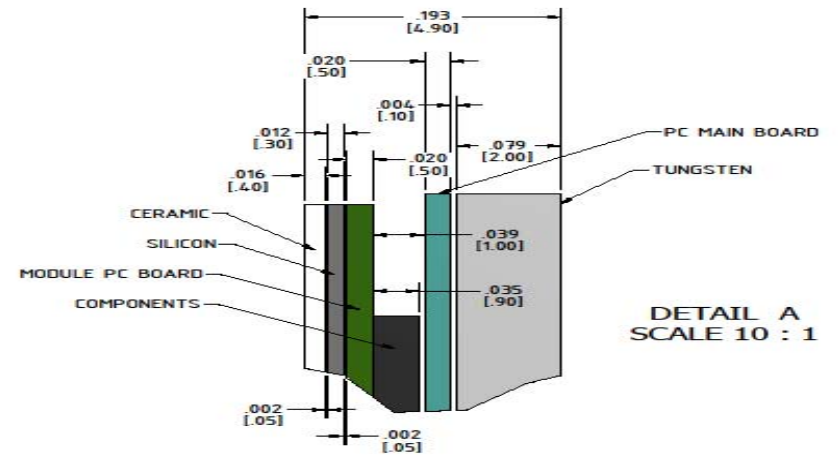
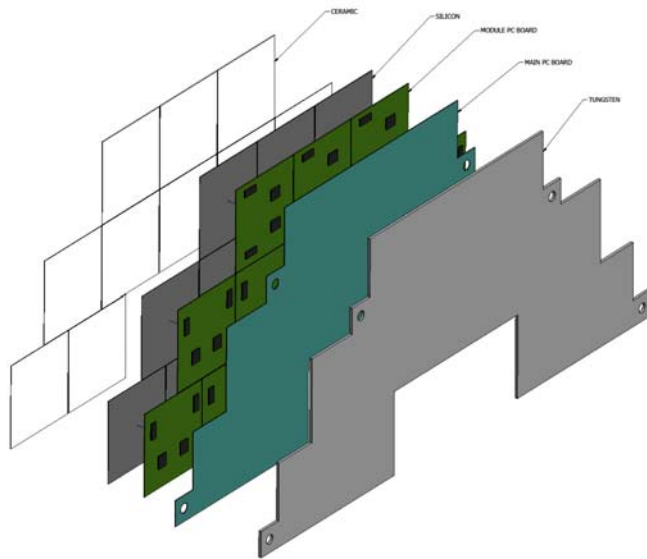


Modification to VTX HV rack roof platform to address interference with DC during north-south East carriage moves.

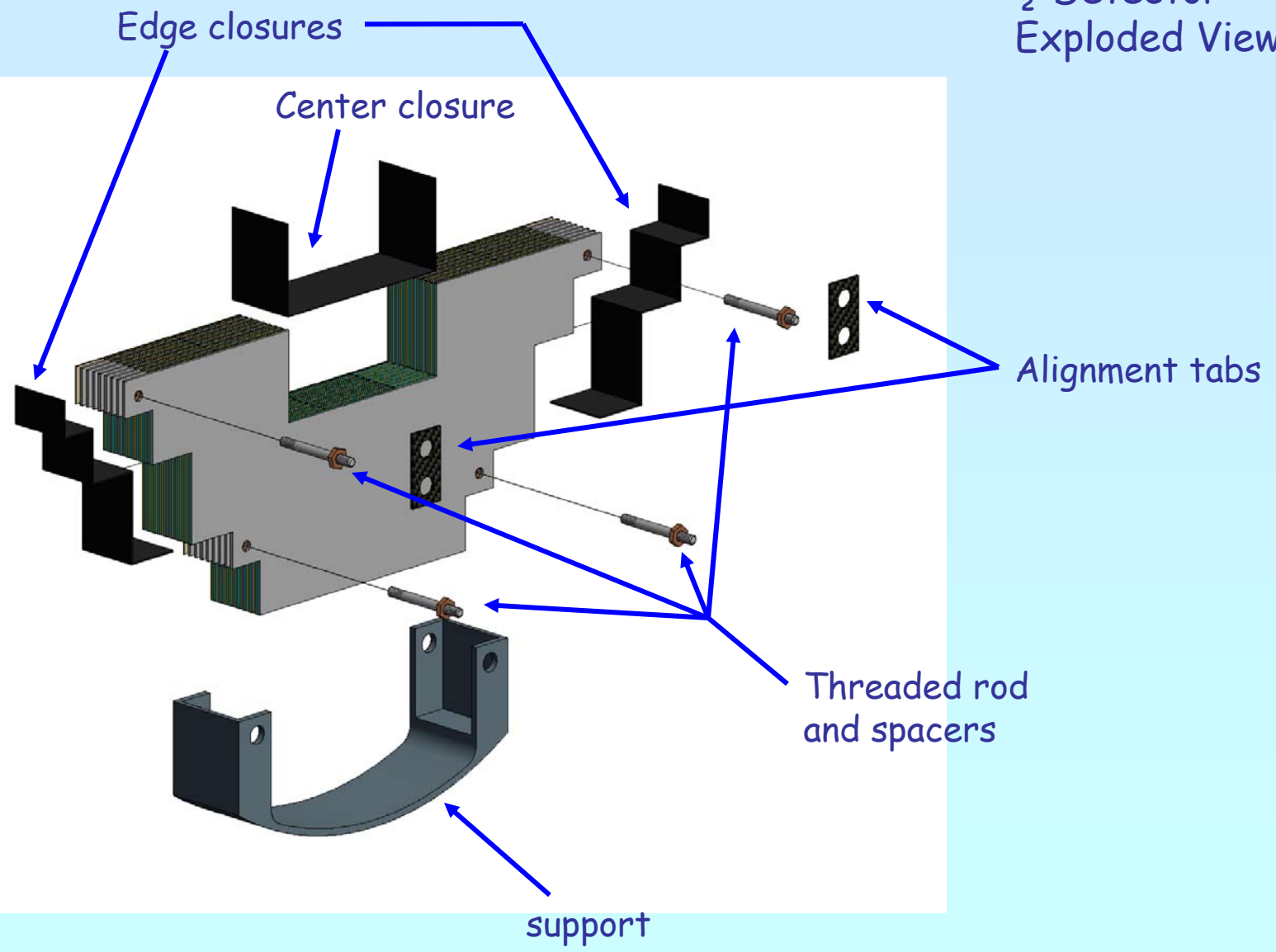


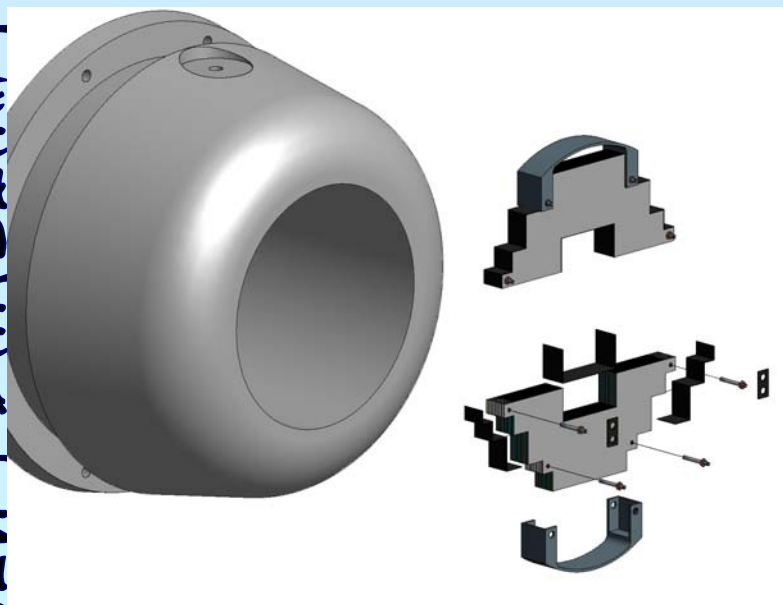
# PHENIX Rack Room Temperatures



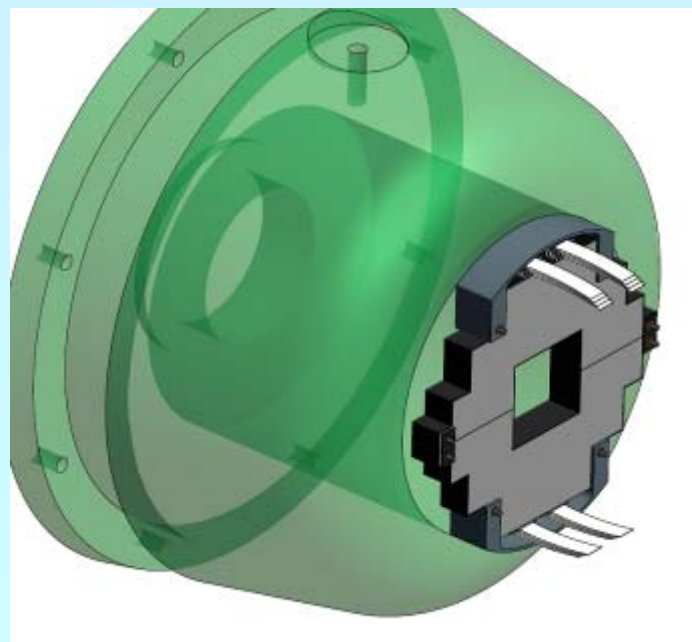


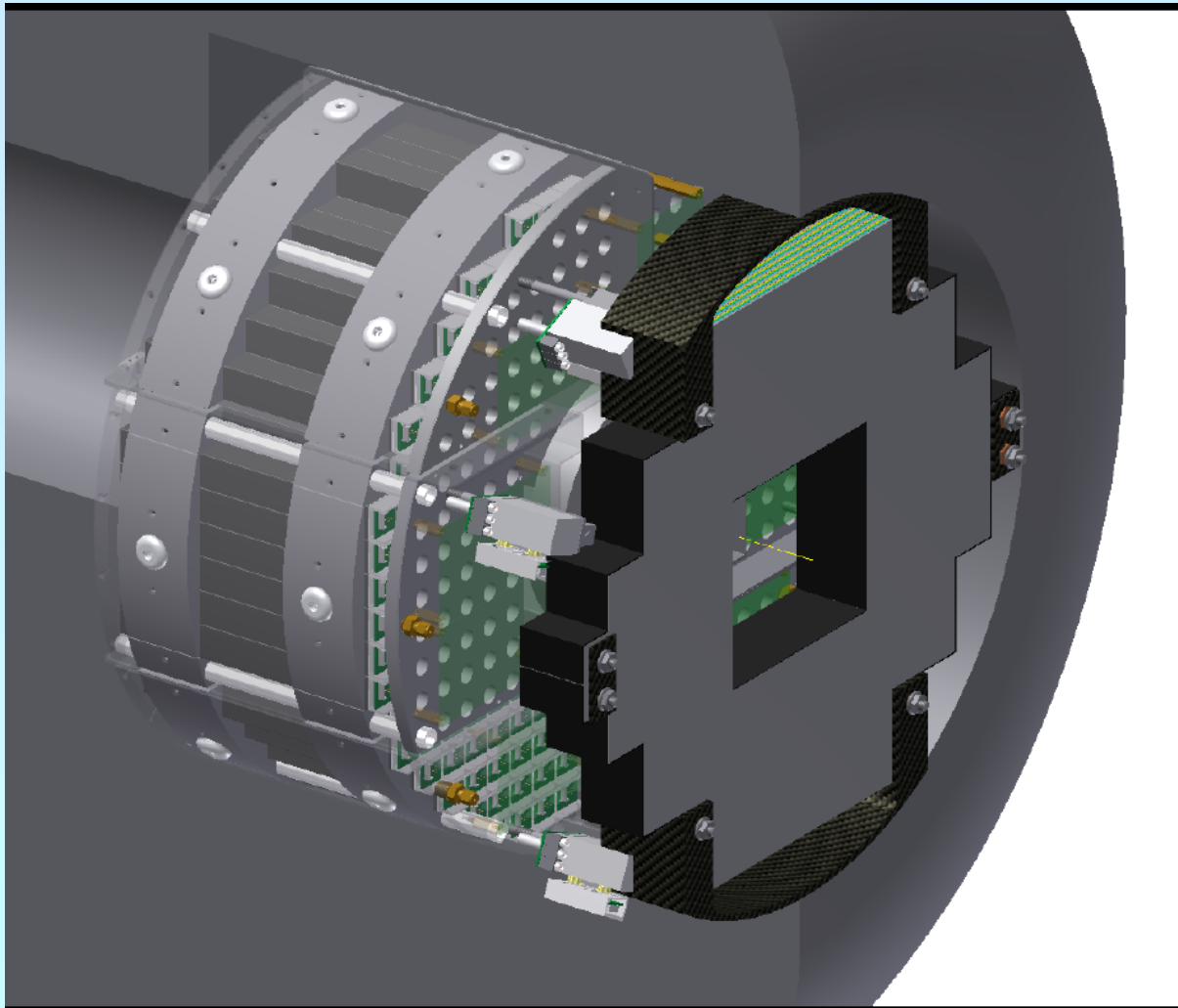
# $\frac{1}{2}$ Detector Exploded View





## Installation





Existing MPC  
Issues to be  
addressed:

Cooling  
(incorporate chill  
plates for water  
cooling, or  
forced air  
cooling)

Interference  
with MPC light  
collectors  
(redesign, move  
to station 1?)

Routing MPC  
cables (step  
shape allows  
space, change  
South MPC  
cables from flat)



Proposed Engineering Design Fabrication and Assembly Schedule

TECHNICAL SUPPORT ZONE

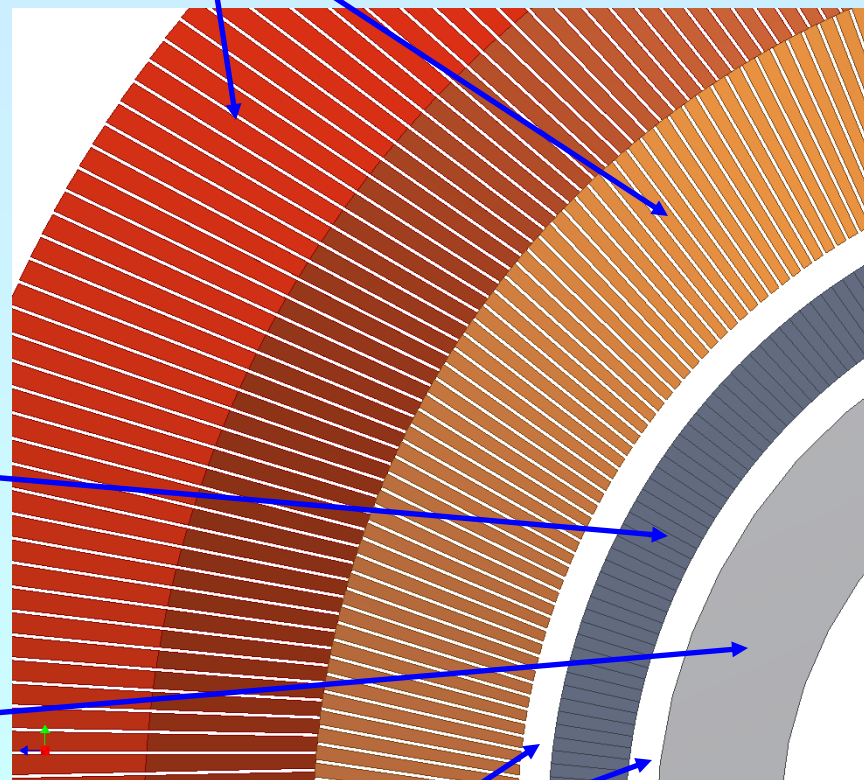
Project Approval	6/4/2012
Engineering Design and Analyses	6/4/12-10/1/12
Final Design Approval	10/15/12
Detail Fabrication and Procurement	10/15/12-4/15/13
Assembly	
North	4/15/13-7/15/13
South	5/15/13-8/15/13
Inspection and QA Tests	
North	7/15/13-9/15/13
South	8/15/13-10/15/13
Installation	
North	9/15/13-10/15/13
South	10/15/13-11/15/13
Commissioning	
North	10/15/13-11/15/13
South	11/15/13-12/15/13



Inner and outer Hadronic Calorimeters  
256 segments each, steel and scintillator  
0.9 meter total thickness, ~4.6 meters  
long. Note how the outer and inner steel  
segments are angled with respect to  
radial lines (by 5 degrees, with the inner  
HCal steel angled in the opposite  
direction of the outer HCal steel). The  
inner and outer steel plates are also  
offset by a  $\frac{1}{2}$  period.

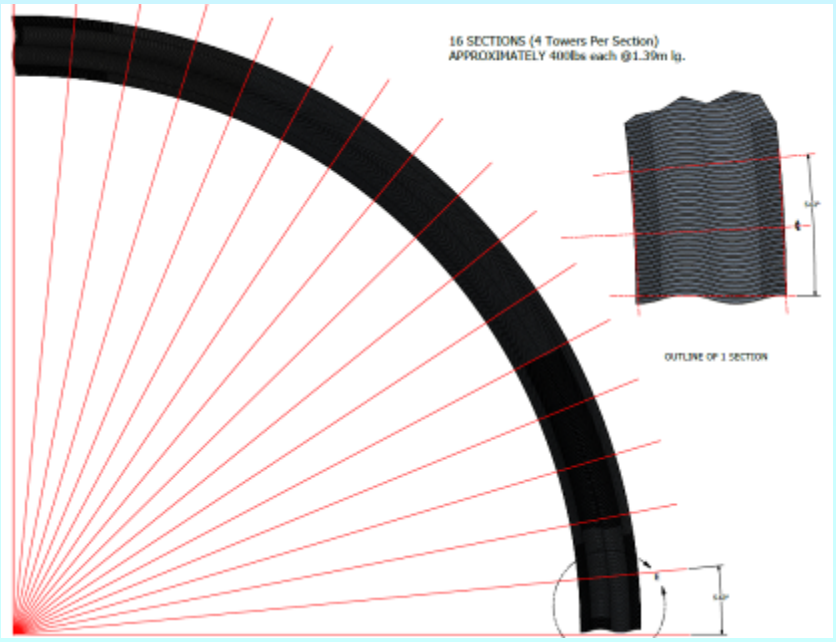
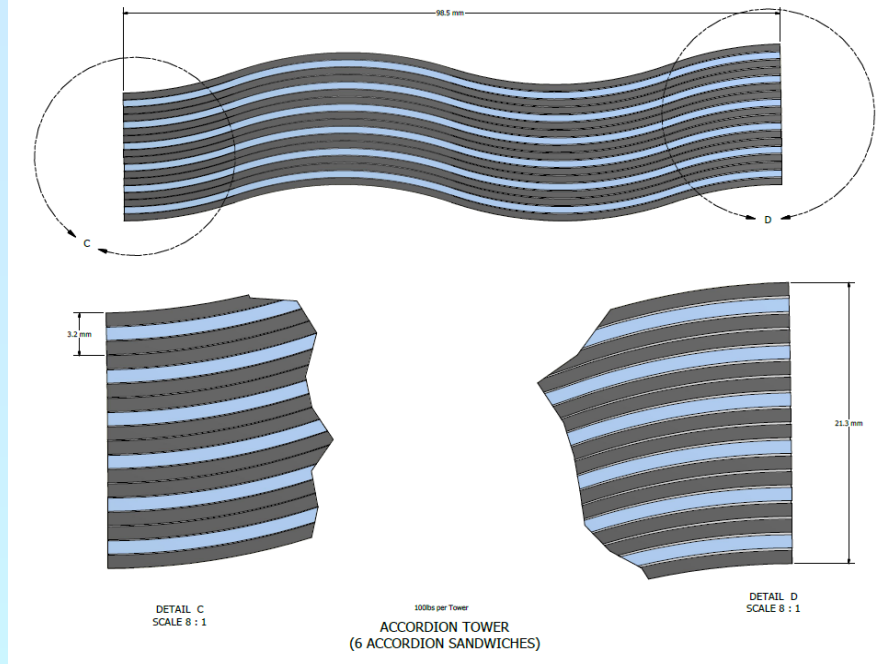
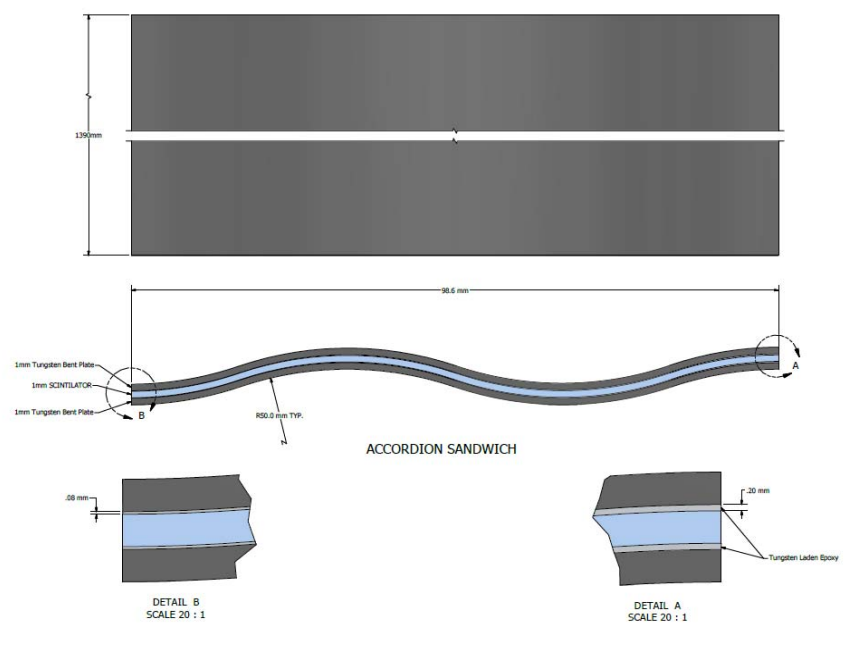
ElectroMagnetic Calorimeter  
314 segments, Tungsten  
and scintillator 0.1 m th  
~2.8 m long

Superconducting solenoid  
2 Tesla Magnet and cryostat  
.70 m inner radius, .20 m th  
~2 m long



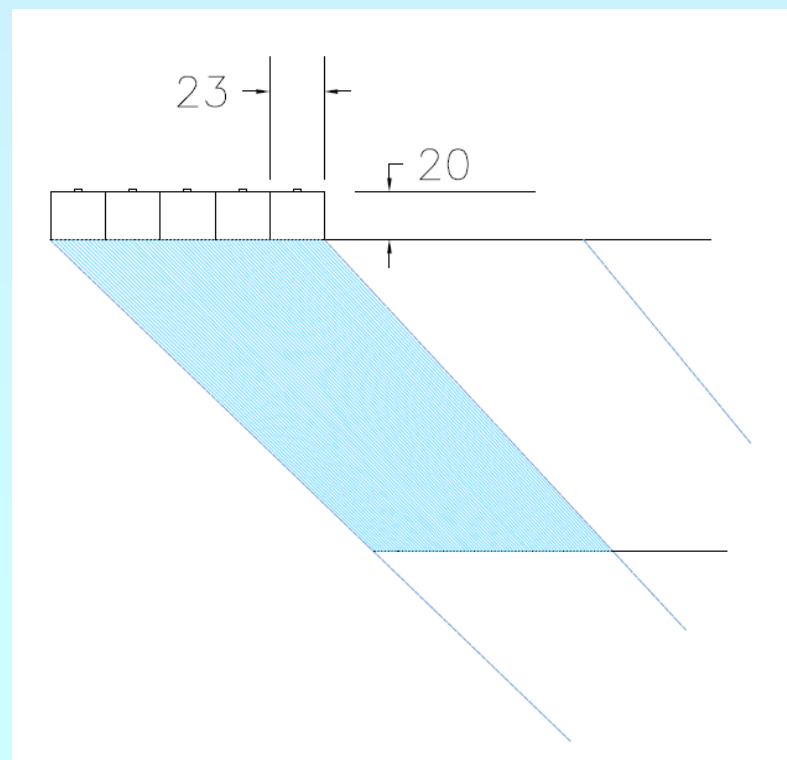
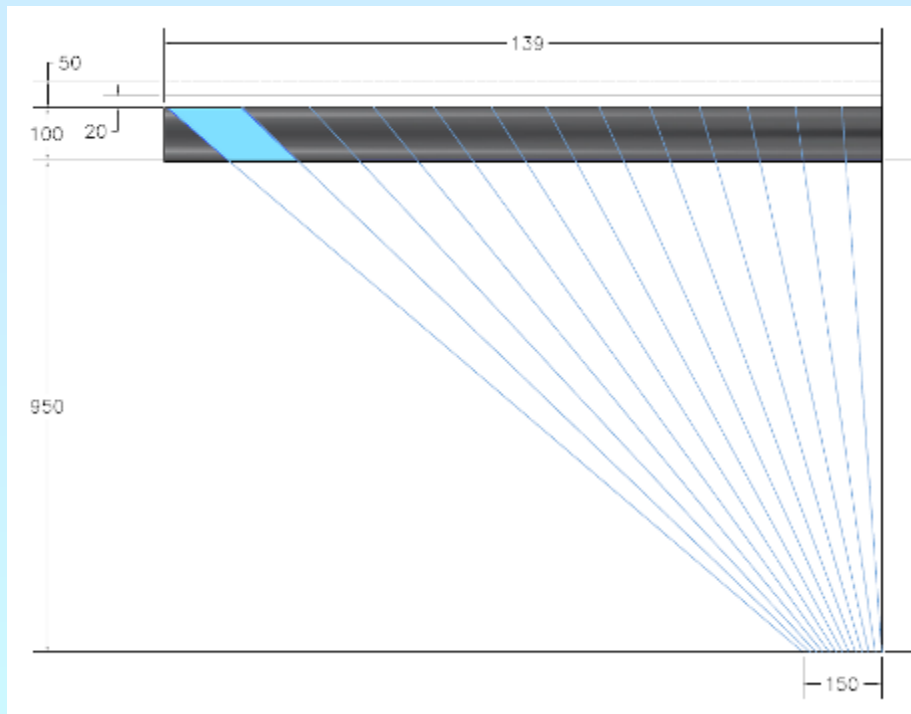
*Note: All dimensions  
are current estimates  
and subject to change*

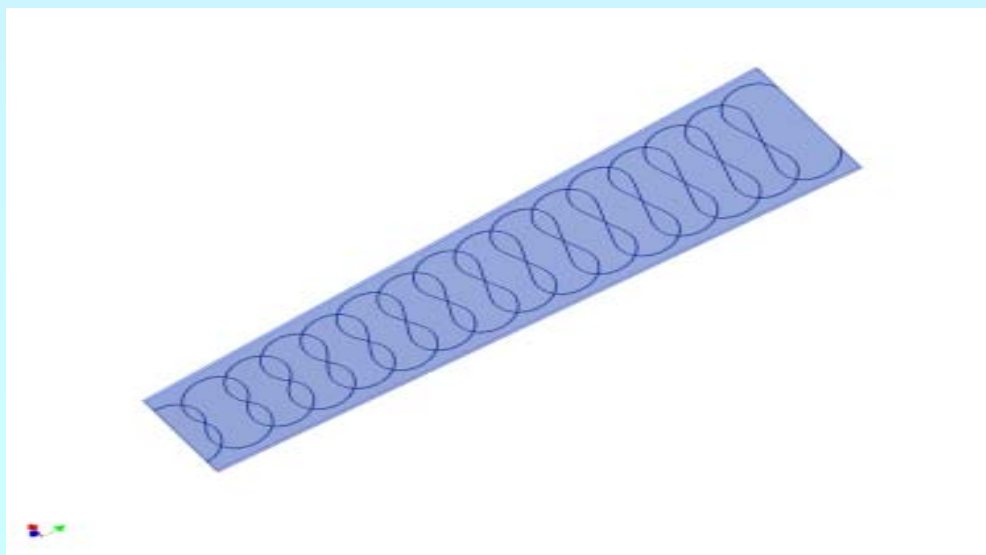
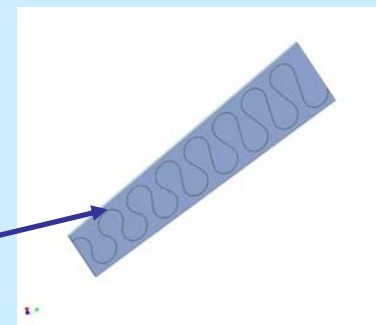
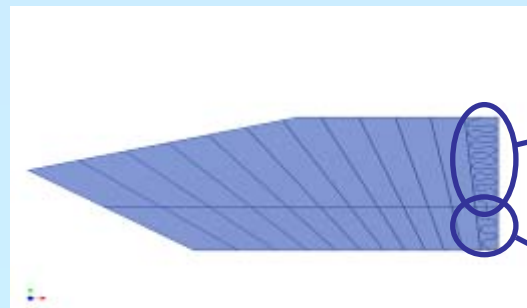
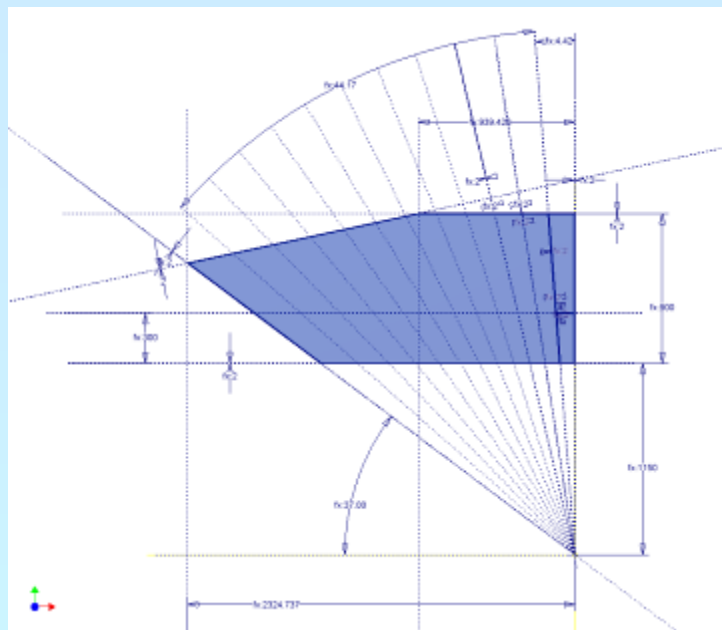
Envelope allowance for electronics,  
support structure and detector services



Electromagnetic calorimeter segments using "accordion" shaped scintillators and tungsten plates to optimize detector sampling

Meeting with potntial vendor today

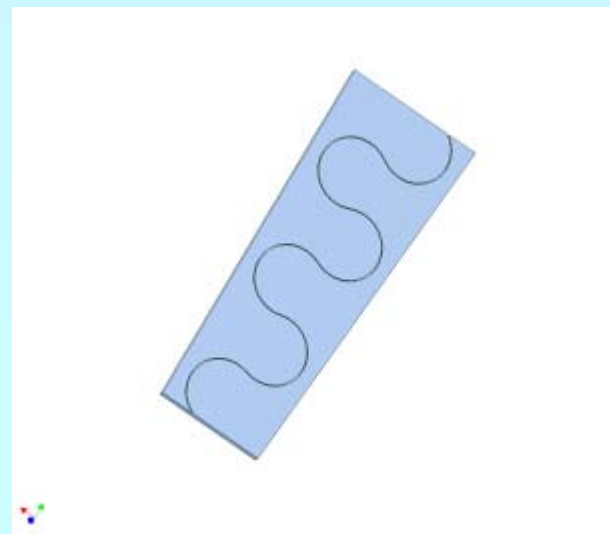
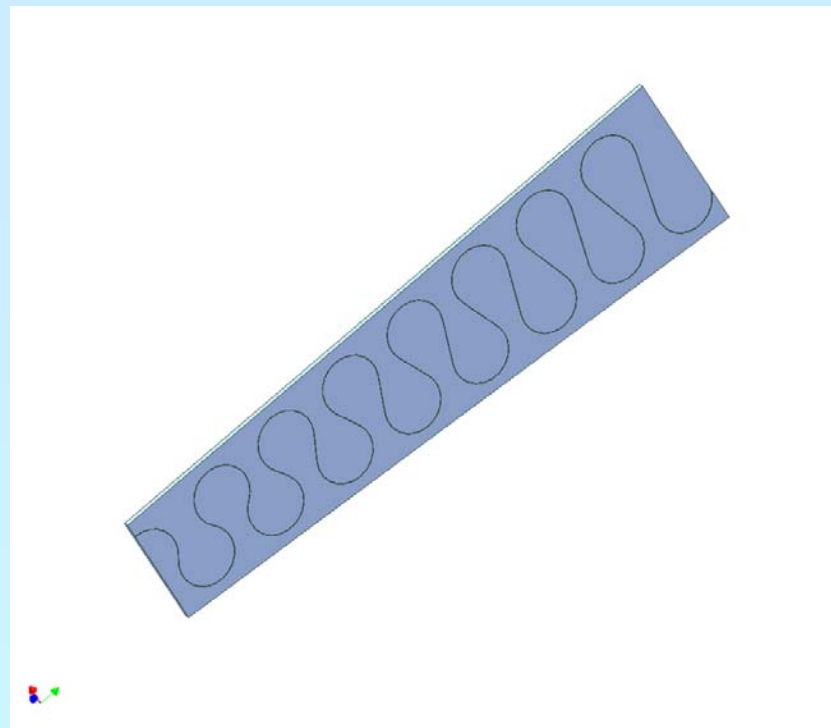


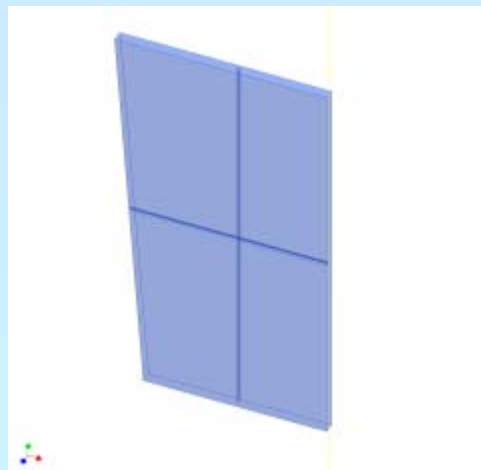
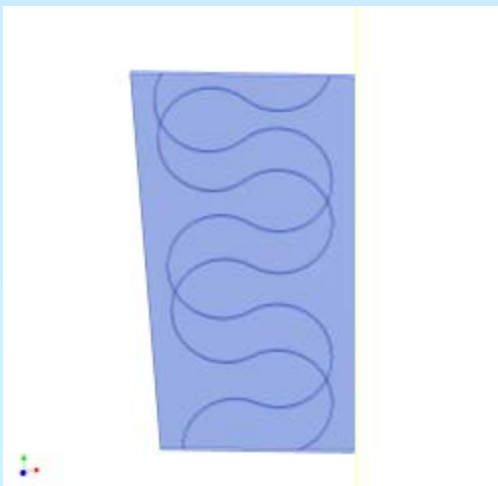


Design Concepts for each  
scintillator plate detail:

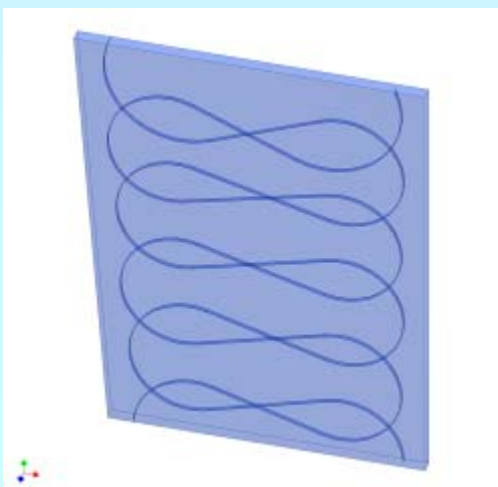
- Each plate has an optic fiber imbedded on both sides (illustrations at right are semitransparent so that the opposing patten can be seen)
- Minimum fiber bend radius is 2.75 cm
- Fiber is serpentine so as to come no closer than 2 cm to itself at any point and no closer than 1 cm to scintillator edges.
- Crossing of fibers in plane view is as close as possible to 90 degrees to minimize overlap.

(Note scintillator sections shown are not transparent..Opposite side fiber is not visible)





Inner Scintillator prototypes

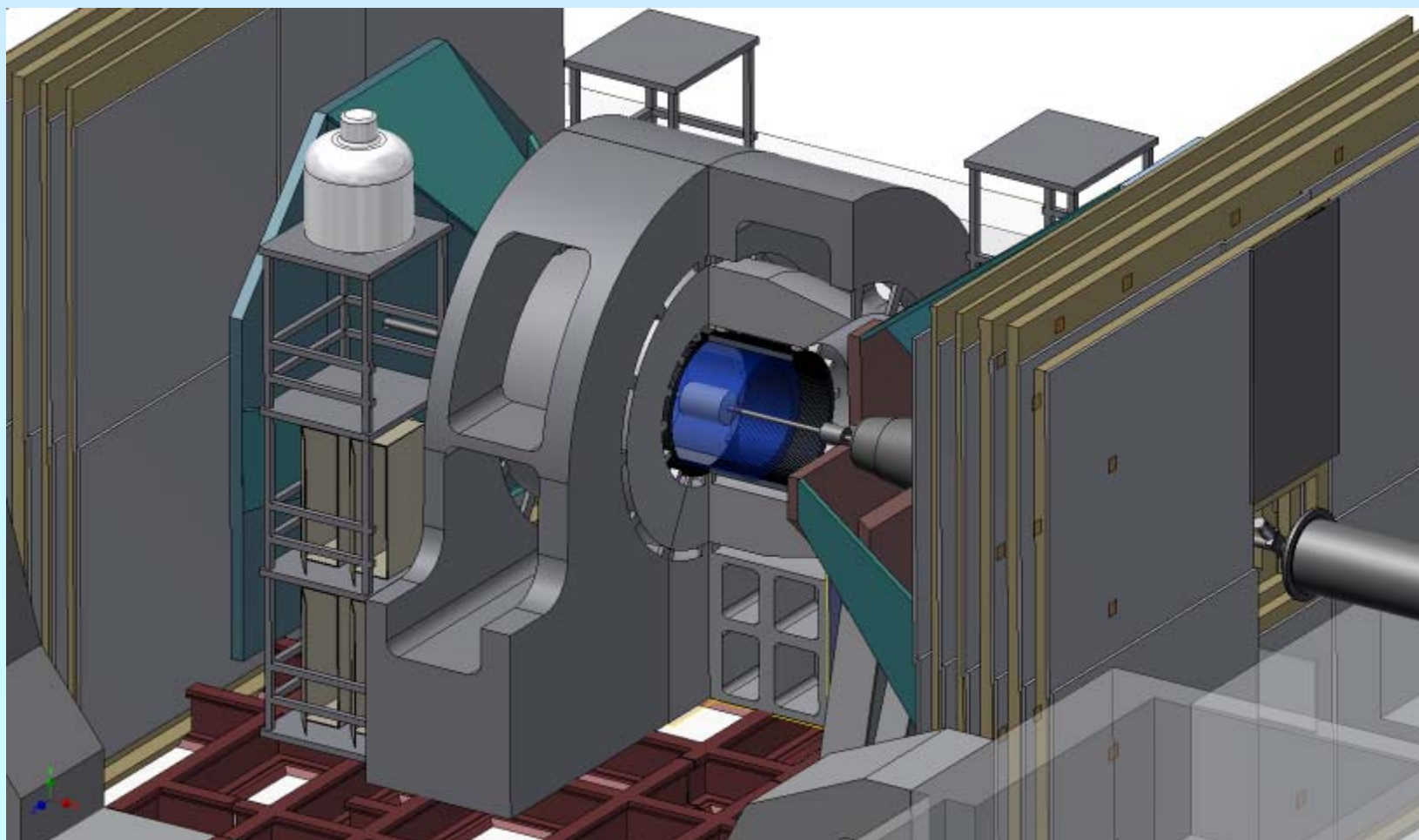


Outer Scintillator prototypes



# sPHENIX overall assembly, integration and maintenance concept

TECHNICAL SUPPORT ZONE



1. Configuration Management - New Procedures in progress: Results of BNL "Gap Analysis":

*Does (PHENIX) design, construct, modify or maintain responsible for designing real property assets that comprise the Laboratory's physical plant, including installed structures, systems and components (SSCs) that are part of the Laboratory's support or research infrastructure? Note: Real property asset do not include personal property, experiments, bench-top research apparatus, research instruments, etc. Is Directorate/Department/Division responsible for other Laboratory assets, which based on Associate or Assistant Laboratory Director, Department Chair or Division Manager discretion, should be managed under the CM Program?*

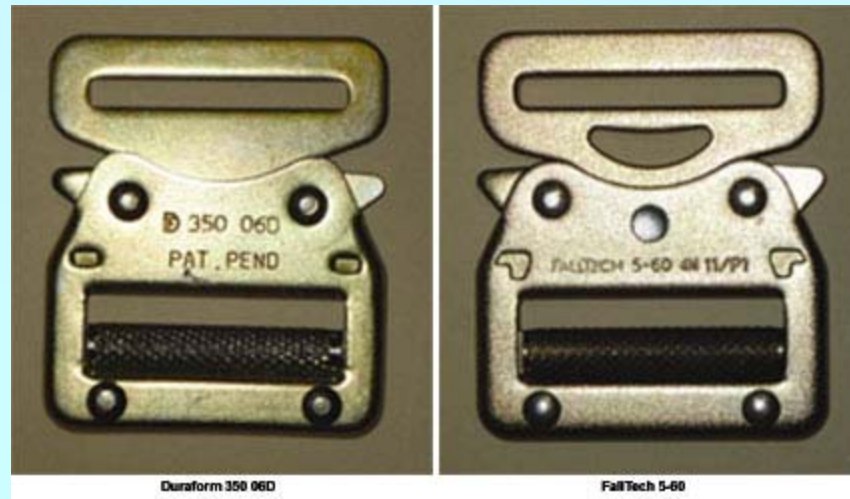
Yes. Much of the physical infrastructure (civil/utilities/safety systems) is covered by the CAD program. Equipment under Physics' stewardship largely limited to experimental instrumentation, electronics and gas distribution equipment operated at low flow/low pressure conditions, and much of this is managed under ESRs. CAD maintains engineering documents under their program for the equipment managed under its program. CAD, supported by F&O, maintains much of the physical infrastructure for PHENIX. Physics Department works with instrumentation racks and gas distribution manifolds downstream of the bulk storage facility, but this is limited to experimental instrumentation, electronics and gas distribution equipment operated at low flow/low pressure conditions. In summary, PHENIX CM is a mixture of CAD configuration management procedures (Gas systems, physical infrastructure, electrical power infrastructure, safety systems) and PHENIX configuration management policy (experimental equipment, experimental monitoring and control equipment). PHENIX configuration management policy complies with CAD procedures for experimental review, but is not currently governed by a formal controlled document. The Physics Department will create a PHENIX controlled procedure to appropriately codify its configuration management policy and assure that it conforms to both BNL SBMS requirements and CAD requirements. This will be completed by the end of FY 2012.



2. Emergency Stop Use Notice: FallTech has issued an emergency stop use notice for their full body fall protection harness. All posts must immediately check their fall protection harnesses against those listed in the notice below

FallTech has issued an immediate 'Product Stop Use, Inspection and Replace Notice' regarding all FallTech full-body harnesses with quick-connect ... (bayonet style) buckles. FallTech has issued a product stop usage notice of its full body harnesses using the quick-connect or bayonet style buckles; the male and female halves of the buckle on an unknown number of harnesses were improperly paired, which could cause disengagement or unfastening of the buckle resulting in serious injury or death.

Two models, Duraform 350 06D and FallTech 5-60, may exhibit this defect. If you are using a FallTech full body harness with either of the aforementioned buckles, manufactured between 10.12.10 and 02.09.12, it needs to be removed from service.





Location of Date of Manufacture on Full Body Harness Label.

Full Body Harness Part Numbers that may contain one or more of the defective buckles.

70063QC	7021QCXL	7035XLQC	7082LXQSFD	7083Q3X	HR7081LX
7006XL3QC	7023QC	70373QC	7082Q2XFD	7083QLX	HR7081SM
70082XQC	7034QCL	7039	7082QLX	7083QLXFD	NS7082LX
7008QC	7034QCM	70392X	7082QSM	7083QSM	NS7082SM
7008QCXL	7034QCXL2X	7039XL	7082SM	7083SM	NS7082XL
7009QC	7035LQC	7079XS	7082SMFD	7084L	NS7083LX
7009QCFD	7035MQC	70822X	7082SMQSFD	7084M	NS7083SM
7016QC	7035QC3X4X	70822XQSFD	70832X	7084XL	SH70412X
7016QC2X	7035QCL	70823X	70833X	7085L	SH70413X
7016QC3X	7035QCM	70823XQSFD	7083LX	7085M	SH7041LX
7016QCXL	7035QCS	7082LX	7083LXFD	7085S	SH7041SM
7021QC	7035QCXL	7082LXFD	7083Q2X	7085XL	

The full body harness may have one, two or three defective buckles; all buckles must be carefully inspected.

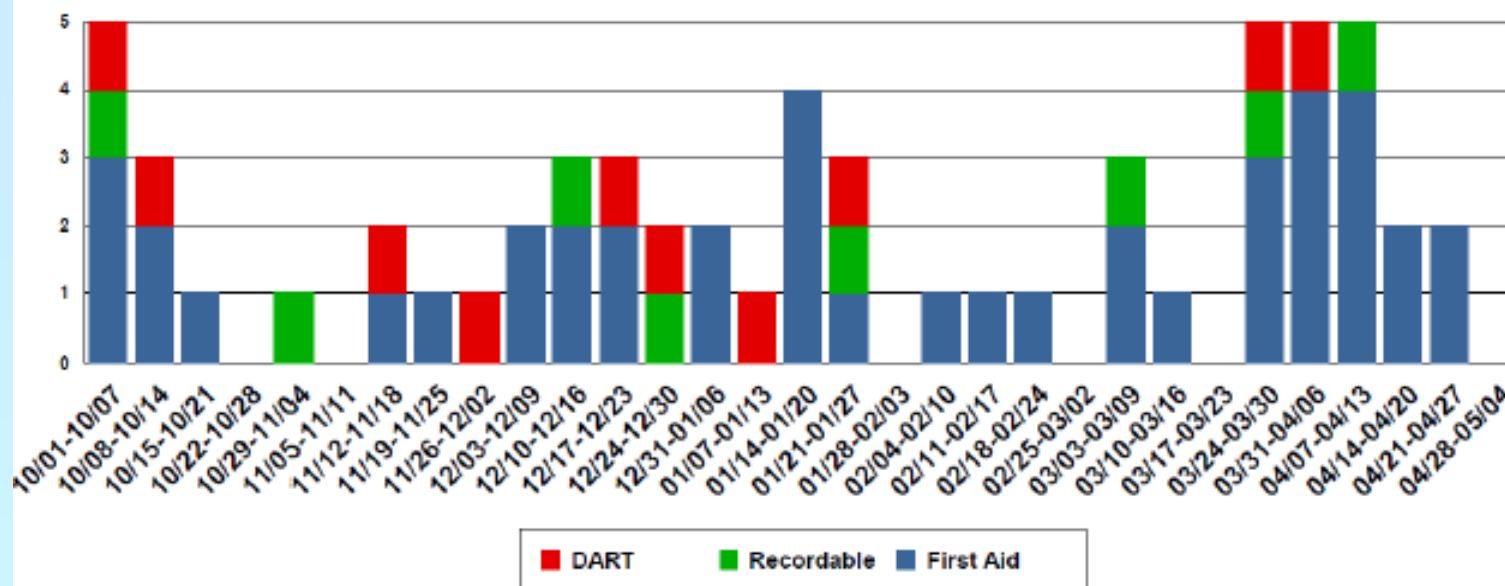
- Locate and examine each harness and ensure each is fastened together.
- If the female half has an engagement window and the male half has a crescent moon shaped cut out, the buckle is properly paired.
- If the female half does not have an engagement window and the male half does not have a cut out, the buckle is properly paired.
- If the female half has an engagement window and the male does not have a cut out, the buckle is defective and must be removed from service.



***If the Quick-Connect buckle on your FallTech full body harness has an engagement window on the female half and does not have a half moon shaped cut out on the male half, the buckle is defective and may not remain positively engaged while the harness is in use. Any FallTech full body harness having one or more buckles exhibiting this condition must be removed from service and returned to FallTech immediately. Failure to do so may result in serious injury or death.***

Note the model number, date of manufacture and quantity of defective buckles and contact FallTech's customer service department at 800 719 4619 or 323 752 0066; FallTech will issue a return authorization and a call tag. The product will be collected, repaired or replaced, and returned to you at our expense.

## Injuries Per Week (FY) As of 5/4/2012



### Injury Status:

FY12 YTD: DART – 10, TRC – 18, First Aid – 42

FY11: DART – 27, TRC – 42, First Aid – 45

FY10: DART – 19, TRC – 33, First Aid – 52

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/OccInj/BNLIInjuries.aspx>

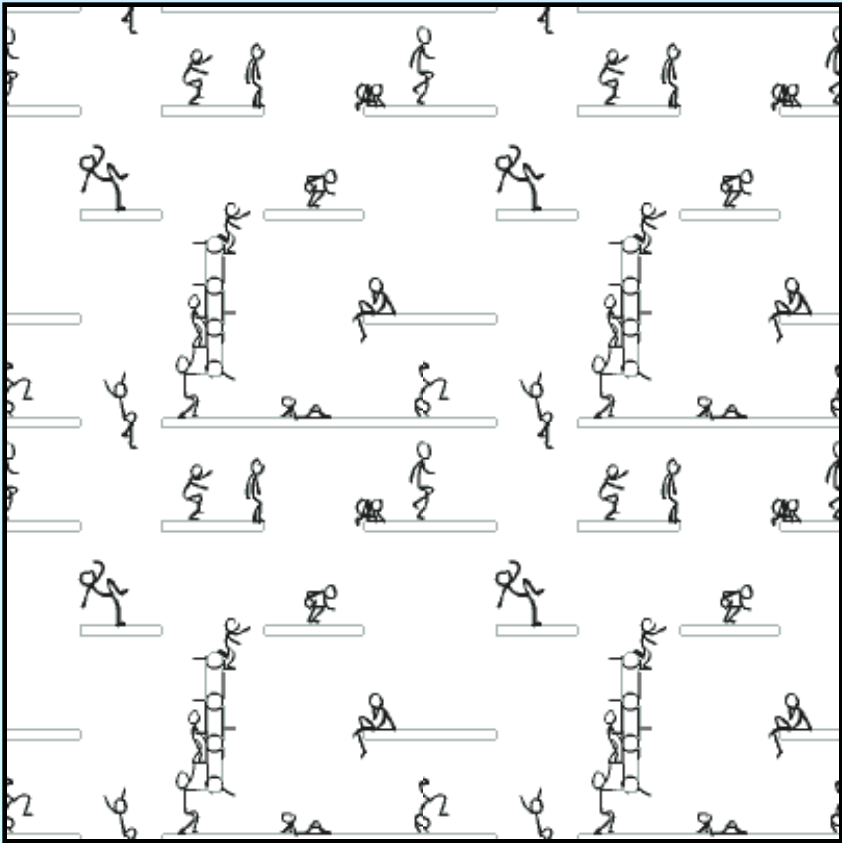
### Recent Injuries

4/27/12	First Aid	An employee was injured lifting and dumping paper. At the clinic, first aid was given.
3/31/12	DART	An employee bent down and felt a sharp twinge in his neck and shoulder blade. Since the OMC was closed, the employee was transported to a local ER.
3/27/12	First Aid	An employee reported an injury to a leg while sitting. At the OMC, first aid was given.
1/23/12	Recordable	UPDATE: An employee injured his arm while pulling on a wrench. This was initially classified as a first aid case. This is now recordable due to a positive MRI and physical therapy.

Recent Events		
5/3/12	SC-BNL	A worker's clothing was contaminated while working in a Radiological Buffer Area. The contamination was discovered when the Personnel Contamination Monitor alarmed. The contamination level was approximately 160,000 dpm. ( <a href="#">Event Link</a> )
5/1/12	Non-Reportable	Bldg 490, mechanical equipment room 5, has a "lead/lag" system using two 480Vac three phase air compressors to supply building control air. Overload protection is provided by two Dayton motor controllers installed during the Low Level Radiation Facility construction. During replacement of air compressor number 1's motor, the electrician found the motor coil burned out. Investigating the cause, the electrician examined the controller and found one of the three over load protection "heaters" missing from the controller. A wire was installed in place of the over load protection. Examination of the controller for air compressor 2 shows the exact same configuration. The wire used as the jumper is of the same type and appearance as the internal wiring of the controller, suggesting that the wire was part of the original installation. ( <a href="#">Event Link</a> )
4/30/12	Non-Reportable	Fire/Rescue reported a small leak (< 1 gallon) of gear oil from an employee's private vehicle, which was contained on the pavement of the Bldg. 740 Parking lot. There was no release to soil. The incident is not reportable to New York State. ( <a href="#">Event Link</a> )
4/27/12	Non-Reportable	A chemist was moving waste from a lab to the 90 day holding area. The container was dropped in a hallway and contents spilled. Contents included 55% water, and smaller amounts of methanol and iodine. IH, BNLF, and the Environmental group responded and assisted in cleanup and disposal of all materials. There are no personnel or environmental issues at this time. ( <a href="#">Event Link</a> )

# Where To Find PHENIX Engineering Info

Less than 2 months until end of run.



[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)

